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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,143	10/30/2000	Satoshi Shinada	Q60866	6582

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 04/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/698,143

Applicant(s)

SHINADA ET AL.

Examiner

Michael P Nghiem

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-44 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 11, 12, 14, 15 and 17 is/are rejected.
- 7) ☒ Claim(s) 7, 9, 10, 13 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The Amendment filed February 21, 2002 has been acknowledged.

Withdrawal of Allowability

1. The indicated allowability of claims 2 and 11 are withdrawn in view of the newly discovered reference(s) to Long et al. (US 6,161,927). Rejections based on the newly cited reference(s) follow.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

Claims 18, 42, the differences in height and volume of elements are not described in the specification.

Claim 20, the rib is not described in the specification to be provided with a concave portion.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the differences in height and volume of elements (claim 18) and the rib provided with a concave portion (claim 20) must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered.

Claim Objections

4. Claim 15 is objected to because of the following informalities:
- "perpendicular" (line 3) should be – parallel --.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2861

How can the second chamber contain both ink and maintenance liquid?

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- (e) the invention was described in-
 - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
 - (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-6, 8, 11, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Long et al. (US 6,161,927).

Long et al. discloses all the claimed features of the invention including:

- an ink cartridge (10) for use in an ink jet recording apparatus (Fig. 1) comprising:
 - a container body (12) having an ink chamber (32) and an opening portion (opening of 32) wherein an ink absorbing member (14) for absorbing ink is housed in said ink chamber (Fig. 1);

Art Unit: 2861

- an ink supply port (bottom port of 10, Fig. 1) which communicates said ink chamber to a recording head (column 1, line 16);
- a lid member (18) sealing said opening portion of said container body;
- a spacer (16), which is disposed between said lid member and said ink absorbing member and is separate from said lid member (Fig. 1), wherein said spacer has a base portion which faces said lid member (Fig. 1), and a pressing portion (50) for pressing said ink absorbing member toward said ink supply port (Fig. 3).
- an ink injecting port and an air communicating port (58, 56, 58, 60, 62, 64) are formed in said lid member (Fig. 1), and through holes are (38, 40, 42, 44, 46, 48) formed in said spacer so as to be opposed at least to said ink injecting port (Fig. 1);
- said pressing portion comprises a rib (50) extending to a longitudinal direction of said container body at an opposite side to said ink absorbing member (Figs. 1, 3);
- a projection (projections of 38, 40) engaging with said lid member is formed in said base portion (Fig. 1);
- said pressing portion comprises ribs which are positioned at both sides of said container body in a width direction (Fig. 3);
- said ribs are provided with a convex portion (bottom portion of U-shaped 50) at an area of said ink absorbing member which opposes said ink supply port (Fig. 3).

Claims 14, 15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Ishinaga et al. (US 6,336,719).

Art Unit: 2861

Ishinaga et al. discloses all the claimed features of the invention including:

- an ink cartridge (100) for use in an ink jet recording apparatus (Fig. 2) comprising:
 - a container body (body of 100) having an ink absorbing member (102) for absorbing ink in an ink chamber (101);
 - an ink supply port (100a) which communicates said ink chamber to a recording head (column 13, line 10);
 - an internal space of said container body is divided into a plurality of areas by walls (Fig. 2), and only one (101) of said areas stores ink and is provided with said ink supply port (Fig. 2);
 - said internal space of said container body is divided by first walls (vertical portions of 111) parallel to an ink supply needles arrangement direction (direction of 100a) into chambers, each of said chambers is opposed to each ink supply needle (chambers opposed to 100a, entry of needle, Fig. 2), and said chambers are divided by a second wall (horizontal portion of 111) perpendicular to the first walls.

Allowable Subject Matter

7. Claims 7, 9, 10, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2861

8. Claim 16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

9. Claims 18-44 are allowed.

Reasons For Allowance

10. The combination and method as claimed wherein said pressing portion comprises plural ribs extending to a longitudinal direction of said container body, and each of said plural ribs is joined to each other (claim 7) or a convex portion is formed at said ink supply port, said convex portion protrudes from a bottom of said container body and has an ink flow path communicating with said ink supply port (claim 9) projections are formed at corners of said base portion in a longitudinal direction so as to contact with an inside of said ink container body (claim 10) or said container body is divided into a plurality of ink chambers by walls, each of said plurality of ink chambers communicating with said ink supply port, and each of said plurality of ink chambers is provided with said ink absorbing member and said spacer (claim 13) or said second divided chamber contains one of reserve ink and maintenance liquid (claim 16) or wherein a first rib height of said first ribs is different than a second rib height of said second ribs, and wherein a first member volume of said first ink absorbing member is different than a second member volume of said second ink absorbing member (claims 18, 42) or the first side wall protrudes into said container body to form a protruded

Art Unit: 2861

portion (claims 19, 26) or wherein a storage device storing information regarding an ink stored amount (claims 32, 33) is not disclosed, suggested, or made obvious by the prior art of record.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Seino et al. (US 6,361,138) discloses a cartridge having a storage device for storing ink information (Fig. 3a).

Shinada et al. (US 5,790,158) discloses a wall (510) partitioning an ink chamber inside of a side wall (Fig. 15a).

Response to Arguments

12. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2861

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. An inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 308-0956.

A handwritten signature in black ink, appearing to read "Michael Nghiem", with a stylized flourish at the end.

April 23, 2002